

Application No. 09/418,562  
Amendment Acc. RCE dated August 9, 2004  
Reply to final Office Action dated May 7, 2004

Attorney Docket No. 040070-549  
Page 11 of 13

### REMARKS

Claims 1-8, 10, 12-23, 25, and 27-38 are pending, with claims 1 and 16 being in independent form. By the present amendment, claims 1, 10, 12-16, 25, and 27-30 have been amended and claims 31-38 have been added. New claims 31-34 correspond to original claims 9, 11, 24, and 26.

At the outset, the Applicant acknowledges with appreciation the continued indication of allowable subject matter.

In the final Office Action, claims 1-8, 12, 14, 16-23, 27, and 29 are rejected for obviousness over U.S. Patent No. 4,716,573 to Bergström et al. ("Bergström"). The pending claims are believed allowable over the cited document for the following reasons.

In accordance with the MPEP, three criteria must be met to establish a prima facie case of obviousness. First, the cited documents must describe or suggest all of the claim features. Second, there must be some suggestion or motivation, either in the cited documents themselves or in the knowledge generally available to one of ordinary skill in the art, to have combined the teachings of the cited documents. Third, there must have been a reasonable expectation that the documents could have been successfully combined to yield the claimed invention.

The rejections raised in the Action cannot stand at least because no combination of the cited documents describes or suggests all of the claim features. Motivations to combine the cited documents and reasonable expectations of successful combinations would also be absent, but it should be sufficient to point out the absent features.

For example, claim 1 as amended recites, among other things, "if the selected hop channel is a forbidden hop channel, then: using a time-varying parameter to select, at the present phase, a substitute hop channel from the set of allowable hop channels, wherein the time-varying parameter is independent of conditions on the physical channel.

The Office asserts that Bergström describes determining "a status (index) value (SNR or bit error measurement) which is a function of noise or interference (wherein noise and interference are time-varying parameters) on the channel" at column 2, line 54 to column 3, line 13. Claim 1, as amended, recites that the time-varying parameter is independent of conditions on the physical channel. Support for

Application No. 09/418,562  
Amendment Acc. RCE dated August 9, 2004  
Reply to final Office Action dated May 7, 2004

Attorney Docket No. 040070-549  
Page 12 of 13

the amendment can be found on page 19 of the application, where the Applicant describes that the time-varying parameter can be, e.g., a clock value or a value produced by a random (or pseudo-random) number generator, is used to select a substitute hop channel from the set of remaining allowable hop channels. Accordingly, claim 1 is considered allowable for at least this reason.

In addition, claim 1 now recites that the time-varying parameter is used at the present phase to select a substitute hop channel from the set of allowable hop channels. It appears to the Applicant that in Bergström, the mapping frequency for a specific unallowable hop frequency (say,  $f_n$ ) can be set when that frequency is identified as unallowable and the X matrix can be updated with the status value of  $f_n$ , accordingly. Then, when  $f_n$  is chosen for communication according to some frequency hop schedule, Bergström's arrangement uses the mapping frequency (found in the X matrix) for transmission instead of the unallowable hop frequency  $f_n$ . Consequently, each time  $f_n$  is chosen for communication, it appears that the same mapping frequency is used instead of  $f_n$ .

In contrast, the subject matter defined by claim 1 requires that the choice of substitute frequency be made at the time it's needed, i.e., "at the present phase", or when a forbidden frequency  $f_n$  is chosen for communication according to some frequency hop schedule. Moreover, according to claim 1, a new frequency choice is made each time a forbidden frequency is supposed to be used for communication. Accordingly, claim 1 is believed to be allowable for this reason as well.

With respect to claim 16, this claim has been amended to recite features substantially similar to claim 1, and is believed to be allowable for at least the same reasons that claim 1 is considered allowable. The remaining claims, which depend either directly or indirectly from one of claims 1 and 16, are believed to be allowable for at least these same reasons.

Application No. 09/418,562  
Amendment Acc. RCE dated August 9, 2004  
Reply to final Office Action dated May 7, 2004

Attorney Docket No. 040070-549  
Page 13 of 13

For the foregoing reasons, Applicants believe entry of this Amendment would put the application in condition for allowance. Thus, it is respectfully requested that the Amendment be entered, and a Notice to this effect be provided. If any questions remain, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 

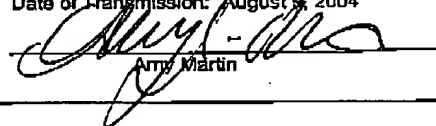
Stephen J. Tyran  
Registration No. 45,846

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(919) 941-9240

Date: August 9, 2004

I hereby certify that this correspondence is being sent by facsimile transmission to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 to the following facsimile number:

Facsimile Number: 703 872 9306  
Date of Transmission: August 9, 2004

  
Amy Martin